

## IN THE UNITED STATES DESIGNATED/ELECTED OFFICE

International Application No.

PCT/JP99/05153

International Filing Date

**20 SEPTEMBER 1999** 

Priority Date(s) Claimed

**21 SEPTEMBER 1998** 

Applicant(s) (DO/EO/US)

TAKADA, Kanji

Title:

ORAL DRUG DELIVERY SYSTEM FOR ENHANCING THE BIOAVAILABILITY OF ACTIVE FORM OF GLYCYRRHIZIN

## PRELIMINARY AMENDMENT

Commissioner for Patents Washington, D.C. 20231

SIR:

Prior to calculating the national fee, and prior to examination in the National Phase of the above-identified International application, please amend as follows:

## IN THE CLAIMS:

Please cancel claims 1-9.

Please add new claims 10-14 as follows:

- --10. A device for colon-targeted oral delivery of glycyrrhizin comprising a suppository-like shaped article containing an amount of glycyrrhizin, said shaped article being made of a suppository base that melts or liquefies at the body temperature, and a coating film of ethylcellulose enclosing said shaped article and having such a film thickness that when the device is transported through the digestive tract to the colon, the film enclosing the liquefied suppository-like article ruptures selectively in the colon by the internal pressure generated by the peristalsis of the intestine.
- 11. The device according to claim 10 wherein said amount of glycyrrhizin is sufficient to overwhelm the rate of hydrolysis thereof by the intestinal flora.
- 12. The device according to claim 10 wherein said coating film is formed by dipping the shaped article in a solution of ethylcellulose.